

WHAT IS CLAIMED IS:

1. A system providing cardiac stimulation, comprising:
 - a disposable sheath;
 - a conductor integrated in the sheath; and
 - a transthoracic pad connected to the sheath and that includes providing the cardiac stimulation to the patient in combination with the conductor by providing two conductive paths, wherein the transthoracic pad acts as a cathode in a first conductive path that travels from the conductor to the transthoracic pad via a chest wall of a patient and as an anode in a second conductive path that travels from the transthoracic pad to the conductor via the chest wall.
2. The system as recited in claim 1, further comprising an electrically conductive, insulated cable embedded in the sheath and extending from the conductor to a proximal end of the sheath to the transthoracic pad, and a connector receiving the cable and connecting the sheath and the transthoracic pad to a defibrillator for the cardiac stimulation.
3. The system as recited in claim 1, wherein the conductor is located at or near a distal end of the sheath.
4. The system as recited in claim 1, wherein the sheath comprises a flexible membrane material.

5. The system as recited in claim 1, further comprising a probe insertable through a mouth into an esophagus of a patient, wherein the probe is covered by the sheath, and wherein the sheath comprises an insulation type coating comprising suitable dielectric strength inside a cavity of the sheath to protect the probe from damage by energy applied during the cardiac stimulation.

6. The system as recited in claim 1, wherein the sheath further comprises an inflatable balloon positioned behind the conductor closing a gap between the esophagus and the sheath and pushing the conductor against a wall of the esophagus.

7. A system providing cardiac stimulation, comprising:
a probe insertable through a mouth into an esophagus of a patient;
a disposable sheath slidably covering the probe;
a conductor integrated in the sheath; and
a transthoracic pad connected to the sheath and providing the cardiac stimulation to the patient in combination with the conductor by providing two conductive paths, wherein the transthoracic pad acts as a cathode in a first conductive path that travels from the conductor to the transthoracic pad via a chest wall of a patient and as an anode in a second conductive path that travels from the transthoracic pad to the conductor via the chest wall.

8. The system as recited in claim 7, further comprising:

an electrically conductive, insulated cable embedded in the sheath and extending from the conductor to a proximal end of the sheath to the transthoracic pad, and

a connector receiving the cable and connecting the sheath and the transthoracic pad to a defibrillator for the cardiac stimulation.

9. The system as recited in claim 7, wherein the conductor is located at or near a distal end of the sheath.

10. The system as recited in claim 7, wherein the conductor is acoustically transparent.

11. The system as recited in claim 7, wherein the sheath comprises a flexible membrane material.

12. The system as recited in claim 7, wherein the cardiac stimulation comprises cardioversion, defibrillation or pacing in atria of the patient.

13. The system as recited in claim 7, wherein the cardiac stimulation comprises cardioversion, defibrillation, or pacing in ventricles of the patient.

14. The system as recited in claim 7, wherein the cardiac stimulation comprises cardioversion, defibrillation, or pacing of any of a plurality of pacemaker sites within a heart of the patient.

15. The system as recited in claim 7, wherein the sheath comprises an insulation type coating comprising suitable dielectric strength inside a cavity of the sheath to protect the probe from damage by energy applied during the cardiac stimulation.

16. The system as recited in claim 7, wherein the transthoracic pad is positioned over a thorax of the patient.

17. The system as recited in claim 7, wherein the sheath further comprises an inflatable balloon positioned behind the conductor closing a gap between the esophagus and the sheath and pushing the conductor against a wall of the esophagus.

18. A system providing cardiac stimulation, comprising:
a conductor;
an inflatable balloon;
a disposable sheath comprising a conductor integrated therein at or near a distal end of the sheath and the inflatable balloon positioned behind the conductor to close a gap between the esophagus and the sheath and push the conductor against a wall of the esophagus to provide the cardiac stimulation to the patient; and

a transthoracic electrode pad connected to the sheath and providing the cardiac stimulation to the patient in combination with the conductor by providing two conductive paths, wherein the transthoracic electrode pad acts as a cathode in a first conductive path that travels from the conductor to the transthoracic pad via a

chest wall of a patient and as an anode in a second conductive path that travels from the transthoracic electrode pad to the conductor via the chest wall, with at least one path initially selected for use.

19. The system as recited in claim 18, wherein the conductor assembly is acoustically transparent.

20. The system as recited in claim 18, wherein the sheath comprises a flexible membrane material.

21. The system as recited in claim 18, wherein the cardiac stimulation comprises cardioversion, defibrillation, or pacing in atria of the patient.

22. The system as recited in claim 18, wherein the cardiac stimulation comprises cardioversion, defibrillation, or pacing in ventricles of the patient.

23. The system as recited in claim 18, wherein the cardiac stimulation comprises cardioversion, defibrillation, or pacing of any of a plurality of pacemaker sites within a heart of the patient.

24. A system providing cardiac stimulation, comprising:
a probe insertable through a mouth into an esophagus of the patient;
a conductor;
an inflatable balloon;

a disposable sheath slidably covering the probe and comprising a conductor integrated therein at or near a distal end of the sheath and the inflatable balloon positioned behind the conductor to close a gap between the esophagus and the sheath and push the conductor against a wall of the esophagus to provide the cardiac stimulation to the patient; and

a transthoracic electrode pad connected to the sheath and providing the cardiac stimulation to the patient in combination with the conductor by providing two conductive paths, wherein the transthoracic pad acts as a cathode in a first conductive path that travels from the conductor to the transthoracic pad via a chest wall of a patient and as an anode in a second conductive path that travels from the transthoracic pad to the conductor via the chest wall, with at least one path initially selected for use.

25. The system as recited in claim 24, wherein the sheath comprises an insulation type coating comprising suitable dielectric strength inside a cavity of the sheath to protect the probe from damage by energy applied during the cardiac stimulation.